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## Various forms and mechanisms of Chinese-Russian cooperation in the energy sphere and the role of non-governmental structures



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## ABSTRACT

A number of multilateral cooperation projects in Central Asia relate to the development of the interaction between China, Russia and other states in the region in the frame of the Shanghai Cooperation Organization (SCO). In 2015, the organization increased the number of its members for the 1st time since 2001 and stressed the development of non-governmental structures including an energy club or a business club as one of the key factors.

The energy market of Shanghai Cooperation Organization has great potential for China and Russia. Furthermore, the widening of this market accompanies the will of the SCO participants to defend their national interests.

The role of the Energy Club, as a universal mechanism to develop integration ties in a Eurasian energy policy, is examined in the paper. The various aspects and tendencies of China, Russia and other member states' strategy in the SCO's Energy Club are analysed in the article. This paper is of interest to economists, political experts, planners, lecturers and students interested in Asia Pacific and Central Asia affairs. Copyright © 2016, Far Eastern Federal University, Kangnam University, Dalian University of Technology, Kokushikan University. Production and hosting by Elsevier B.V. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

## 1. Introduction

Energy cooperation is one of Russian diplomacy's basic elements; it maintains the national security of the country. Russian contact with member-states of the Shanghai Cooperation Organization (SCO) plays an important role. The cooperation between Russia and China in SCO represents one of the main factors that provides the strength and development of the SCO. However, the countries have different perceptions of SCO. The Chinese government examines the SCO as an important economic integration project, with the possibility to expand its economic influence to provide its rapidly developing economy with energy resources. Russia views the main goal of the organization as providing security in the region.

The main hopes in the development of this cooperation are set in the Energy Club, a non-governmental consultative mechanism that strives to discuss the energy strategy of SCO members and to implement joint projects to increase energy security. The purpose

of this structure is to consolidate representatives of government departments, research institutions and business groups. This structure does not mean confrontation with the mainstream energy order but rather represents a search for common development. However, the true functioning of the Energy Club remains inactive because of the practical absence of a multilateral dialogue in the energy sphere on an official capacity. It is easier for large energy companies to find one companion for a common project than to fund it multilaterally.

## 2. Discussion

There are supplying countries and consuming countries in the organization. China is the largest energy consumer, and Russia is the largest energy producer in the SCO. On the one hand, this relationship makes these countries internally dependent on each other; on the other hand, given the instability of the global economy and the dependence of its recovery on the economic growth pace in China, it creates the basis for multilateral interaction. Russia wants to use the SCO as a mechanism to regulate Central Asian energy exports.

The idea of an alliance, which could become a counterweight to the Organization of Petroleum Exporting Countries (OPEC), has

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been discussed for a long time. The plans for the creation of this structure have been launched since in 2011, when the Xi'an Initiative proposed the establishment of the SCO Energy Club senior working group.

The discussion of an informal forum for debate on the country's energy with SCO member-states has been more than five years. The Energy Club was created in 2013 in Moscow by analogy with the Business Club that exists within the SCO framework; the latter club brings together representatives of business.

However, at the new site, both the governments of the member-states and the businesses are expected to participate in the discussion of problems with the energy order mainstream. Consequently, an agreement was signed by the Deputy Ministers of Energy of Russia, Belarus, Kazakhstan, Tajikistan, China, Mongolia, India, Afghanistan, Turkey and Sri Lanka. We can only imagine the sense of the new structure because the Russian Academy of Sciences has become involved in drafting the concept of the SCO Energy Club. This structure allows the SCO to maximally expand the composition of experts who participate in Energy Club measures.

In addition to members, observers and SCO dialogue partners, it is expedient to provide information regarding the agenda and club measures to representatives of countries that are included in the composition of the international organizations with which the SCO has cooperation agreements. It is expedient to provide information to the worldwide energy community as well using mass media to provide the possibility to participate in Energy Club activities. This information provision shall certainly require definite organizational measures and financial expenses; however, the final multiplicative effect shall fully compensate them.

One of the main reasons for the energy club's non-development is the separate energy policy of every participant; therefore, there is no united approach for resource production. The SCO system includes official authorities that make coordinated decisions; however, diversified economic cooperation remains a less-developed trend within the SCO.

For example, Uzbekistan possesses great potential in the oil sector; Tajikistan and Kirgizia have large hydropower resources. Kazakhstan, which has large oil, transport and finance markets, presumes to assume the leadership in Central Asia. However, the dominating role in energy cooperation in the SCO still belongs to bilateral contacts. For example, Russian LUK OIL invested 4 billion dollars in 10 Kazakhstan deposits; thus, cooperation remains between the two countries (*Kondrashov*).

There is also the problem of the ineffective use of resources in Central Asia. Central Asian oil and gas producing countries seek a more secured long-term price agreement. Uzbekistan has increased the production of natural gas, which is limited. Kazakhstan's southern regions need more energy; however, there is no cooperation with neighbouring Kirgizia regions, which possess hydro energy sources. The use of natural gas in Russia is rising faster than was planned in the Energy Strategy 2020; moreover, it also must guarantee supplies to European consumers.

China, as the largest consumer of energy, could play a significant role in the promotion of non-formal contacts in the energy club. The Chinese version emphasizes the openness of the energy club and stresses the organic interaction between governments, markets and academic spheres. As the main energy consumer, China does not actually use the SCO platform to settle its energy problems; instead, it works with all member-states of the SCO.

The dynamics of energy use in China shows that the volume of consumption is constantly increasing, and oil imports to China will have achieved 400 mln. tons by 2030, according to the prognosis (*Korzhubaev*). Russia is keen to establish the energy club as a means to prevent a possible clash with China over Central Asia's energy

resources. In recent years, Chinese companies have moved to enhance their positions in Central Asia.

Earlier, a Chinese national oil corporation concluded an agreement to create joint ventures in India, Iran and Turkmenia and took over control of 23 percent of oil production in Kazakhstan to reduce its dependence on Middle East oil. (*Review Of Oil and Gas*)

The largest oil and gas pipelines have been laid or are being built in China. In 2013, China became a full shareholder in Kashagan, buying a share of ConocoPhillips. In part, this purchase is a very serious factor because initially the mega-project was believed to be the resource base for the Baku-Tbilisi-Ceyhan pipeline, whose main oil flows would be provided to the West.

China's participation in the project means that at least 1/10 of the project's oil will be provided to the East. The necessary infrastructure already exists; the Chinese have built a pipeline through Kazakhstan. In addition, the Chinese are developing gas infrastructure.

The director of the Chinese Economic Development Ministry's department of Europe and Central Asia, Kin Zhi, stressed that raw materials, oil, ore and timber, represented 80% of the trade turnover between China and Russia. In May 2014, Russia's Gazprom and China's CNPC finally signed a historic gas deal that will provide the world's fastest growing economy with the natural gas it needs to maintain pace for the next 30 years.

The Framework Agreement defines the schedule of compiling a gas purchase and sale agreement, a technical agreement and an intergovernmental agreement on the western route. In addition, both sides signed a confidential Memorandum of Understanding for cooperation in the oil and gas sector.

Therefore, the energy sphere is the objective for China to cooperate with SCO members, and its needs in the energy club are obvious, as they are for the other participants. Nearly 50% of applied SCO documents are related to economic interaction. SCO members have repeatedly declared the necessity of the intensification of economic collaboration.

The establishment of such sectors as power engineering is also completely related to the economic relations among SCO countries. The Gross Domestic Product of SCO countries has grown to one-quarter of the world GDP (\$12.4 trillion). Approximately 25% of the world oil reserves, above 50% of the world gas reserves, 35% of coal reserves and nearly a half of the world's explored uranium reserves are located in the territory of SCO countries (*Bushuev*).

At the same time, similar associations have been formed to pursue common interests and synergies in a given sector. Today, this union barely has anything to provide to members of the association. The members' point of view expert explains that the relationships in the energy sector have already been established without the help of the energy club. The union has a regular structure with a bloated staff, and, subsequently, high maintenance costs. By assumption, it is not necessary to expect useful results for specific projects from such a union (*SCO*).

It may be considered that the Energy Club should be a sufficiently approximate combination that possesses a supernatural character, which assumes the delegation of sovereign powers. Alternatively, the Club may decide to move from "easy to difficult", i.e., find points of coincidence without running too far afield. It is not reasonable to pose great tasks such as the creation of the unified regulations for energy resource transit or a common oil balance. Unification will require price liberalization, the unification of energy transportation tariffs, working out of a common tax base, and the coordination of activities at the supplier level.

Subject to the noted problems, we can identify 5 factors that may reinforce the Energy Club's activities and make it more effective and interesting for member-state governments:

- 1. Bolstering the cooperation in the nuclear sphere through the energy club.** Promotion of this factor is primarily interesting for China. Thirty nuclear stations are projected to have been established in China by 2030, and a nuclear budget of 60.3 bln dollars was created for this purpose.

Russia, which is reeling under intense economic sanctions over its role in the Ukraine crisis, is actively seeking to increase its economic clout in the Asia–Pacific region because nuclear energy remains one of Russia's key sectors.

Since 2010, both countries have agreed to expand nuclear power cooperation in several areas, including VVER technology, fast reactors, exploration of uranium mines, fuel manufacturing, nuclear isotopes, decommissioning of old plants, post-processing technology, building floating power plants and developing markets abroad.

In April 2015, China and Russia reported an agreement to bolster bilateral nuclear cooperation as discussions begin to establish new units in existing Chinese facilities (Sridharan). The exact details of the development remain unclear because it occurred within the discussions involving the Iran nuclear deal with P5+1 powers, of which both Russia and China are a part of.

The talks over the construction of the seventh and eighth units of the Taiwan Nuclear Power Station, which is on the Chinese coast, are also said to be in the final stages. The facility has been operational since 2007 and was built by Russia's Atomstroyexport. The two countries penned a major agreement in March 2014, which signalled renewed energy cooperation.

Considering the fact that all uranium reserves that are available for production are located in Uzbekistan and Kazakhstan, it is optimal for China to use the Energy Club services of the fuel material cycle as the promotion of Chinese–Russian bilateral cooperation in the nuclear sphere.

- 2. Promotion of hydro-energy cooperation through the Energy Club.** The basis of this factor is in the cooperation between Russia and China in Central Asia. For example, to eliminate the problem of natural gas production in Uzbekistan, the Energy Club could cooperate to build hydro-power stations in Tajikistan, which possesses renewable energy sources. Therefore, Uzbekistan could use the Club to export natural gas.

The reasonable use of the hydro-energy resources of Kyrgyzia could totally satisfy the needs of Kazakhstan's southern areas for energy resources. Russia and China may also cooperate in forcing the construction of Rogunsk and Kambaratinsk hydro-power stations.

At the same time, with these projects, Russian and Chinese companies may play the leading role in increasing the volumes of hydro-energy resources production in Siberia and in Far East. This role will help to conserve expensive non-renewable resources not only for Russian needs but also for border territories as well as promote energy security and avoid potential conflicts involving third parties.

- 3. Mechanical and power engineering sphere development.** This factor appears to be important both for Russia and China. Russia has sufficient experience in energy equipment production and retains technological advantages in areas such as nuclear stations' equipment.

China is realizing the program of building nuclear stations and assimilating modern Western technologies in mechanical engineering. Through the energy club, Russia and China may have mutual concessions for engineering development and implement

these technologies in other member-states on the basis of unified regulations.

Basic trends of activity in the sphere of power engineering through the energy club may be: the modernization of the existing power capacities and networks; the development of transport infrastructure in region; the combined exploitation of new hydro-carbon deposits and geologic exploration; the formation of conditions for mutual access to electric energy markets and electric energy transit; energy savings and energy efficiency; and the preparation and increase of expert qualifications in the scope of power engineering. It is also expedient to introduce the searching and discussion of specific projects in such spheres as the power engineering industry, advanced processing of hydrocarbon material, atomic power engineering and hydroenergetics.

- 4. Expansion of financial and institutional contacts in the energy sphere.** This factor concerns the attraction of Central Asia Regional Economic Cooperation Program (CAREC) and Central Asian Initiative for Sustainable Development of UNO (SPECA) financial resources to the joint energy projects of the energy club.

In addition, oil demands in the Asian-Pacific region will exceed worldwide demand by 25 per cent, and natural gas demands will have exceeded worldwide demand by nearly 50% by 2025 (Plyaskina and Haritonova). Despite considering difficulties and the long-term period of the SCO, APEC and ASEAN energy market creation, it appears very useful to shape a common approach between these organizations to ensure security in the energy sphere.

It is suggested that, in the future, Russia, China and the EU can unleash competition for Eurasian energy sources. Russia and China are engaged in spirited, although not yet adversarial, competition in Central Asia over access to natural resources. If we examine long-term predictions, for instance, for the next 15 years, it will appear that the disparity of oil and gas prices will be tenfold.

The oil price will increase from \$50 to \$500 per barrel. Although the countries want to invest in large, serious projects, their own projects, under the 50/500 forecast, serious investments should not be provided. The risk level will be absolutely unacceptable for investing trillions of dollars (Who needs SCO).

Thus, one of the prospective tasks of the energy club is to develop a mechanism for solving questionable issues between Russian, Chinese and European oil and gas companies.

- 5. Creation of unified information field in the energy sphere.** Unified innovation is one of the most important conditions for supplying energy security and meeting the national interests of Russia, China and other member-states. The rational step is cooperation between Russia and China in the operational exchange field and in securing the transit of resources.

The creation of a common info-trading market that reflects the information regarding the demand and supply of resources and that regulates prices for energy carriers will definitely promote the establishment of a real competitive environment, the equal cost of resources and a better orientation in prices in the market.

Thus, it is obvious that the problem of the energy club activity is impossible to solve without understanding that this process also requires a longer period of time, the common development of a Eurasian intercontinental field and long-term investment in the oil sphere through the creation of multilateral ventures. Apparently, in these conditions, Russian oil, gas and engineer companies must actively penetrate the Asian market.

The perspective areas of Chinese–Russian activity in the energy sector through the Energy club may be:

- modernization of existing generating capacities and power grids;
- development of transport infrastructure in the region;
- joint development of new hydrocarbon fields and geological exploration;
- creation of conditions for mutual access to electricity markets and its transit ([SCO Energy Club](#)).

It is vital for these areas to develop on mutually beneficial terms and not grow into a fierce rivalry, which would be detrimental for both. Gazprom continues to boost the cooperation with its Chinese partners. Power of Siberia, the world's largest project for gas supplies via the eastern route, is well underway. Today, the Framework Agreement between Russia and China has been signed for gas supplies via the western route. This legally binding document creates the necessary prerequisites for signing a gas purchase and sale agreement within this top-priority project.

### 3. Conclusions

Therefore, with the leading role of China and Russia, the energy club can become an association of energy suppliers, transit countries and consumers. This club can also become a coordinating body that would contribute to the development of economic and energy ties between states and companies. At the same time, regardless of how interesting the theoretical problems of economic and energy cooperation in the SCO for participants in discussions within the Club are, a long-term stable interest in the platform for business structures will sustain only if there are specific bilateral and multilateral projects guaranteed with both investment and political support.

The goal of the energy club is the formation of an atmosphere of openness, confidence in the discussion of vital economic and legal problems, and an unhindered exchange of opinions regarding methods of resolution, at the expert level, which is not limited by rough frames of established procedures. Specific offers for governmental structures of all levels may be finally formed as the results of these unhindered discussions. Under conditions of the continuing instability of the global economy, the activation of the SCO energy policy would play a significant role in ensuring the sustainable growth of the countries that are members of this organization.

Mao Zedong said: "Perspectives are bright but the road is tortuous". It is in the interests of Russia and China to make this road less tortuous and more predictable.

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